

CLAIMS:

1. A system for managing memory space in a mobile device, comprising:
 - a plurality of data storage locations;
- 5 a plurality of software applications, each software application being operable to store data to a different data storage location; and
- a data store management system operable to access and delete data stored in the plurality of data storage locations in accordance with one or more pre-selected control levels;
- 10 wherein if insufficient memory space is available in one of the data storage locations, then the data store management system accesses at least two of the data storage locations and deletes data from at least one of the accessed data storage locations.
- 15 2. The system of claim 1, wherein the data store management system accesses at least the one data storage location and at least one other data storage location and deletes data from at least one of the accessed data storage locations.
- 20 3. The system of claim 1, wherein the data store management system sequentially accesses each of the plurality of data storage locations and deletes data from one or more of the accessed data storage locations in accordance with one or more pre-selected memory retention configurations.
- 25 4. The system of claim 3, wherein a memory retention configuration is pre-selected for each of the plurality of data storage locations.
5. The system of claim 1, wherein the data store management system deletes expired data from at least one of the accessed data storage locations.
- 30 6. The system of claim 5, wherein the expired data includes calendar data for a past time or date.

7. The system of claim 1, wherein the data store management system applies a memory retention algorithm to delete data from at least one of the accessed data storage locations.

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8. The system of claim 7, wherein the data store management system applies a least-recently-used (LRU) memory retention algorithm to delete data from at least one of the accessed data storage locations.

10 9. The system of claim 7, wherein the data store management system applies a first in - first out (FIFO) memory retention algorithm to delete data from at least one of the accessed data storage locations.

15 10. The system of claim 1, wherein the pre-selected control levels are configured by a device user.

11. The system of claim 1, wherein the pre-selected control levels identify one or more time periods during which the data store management system will not delete data from the accessed data storage locations.

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12. The system of claim 1, wherein the pre-selected control levels identify one or more minimum file size of the data deleted by the data store management system.

25 13. The system of claim 1, wherein the data store management system deletes data from at least one of the accessed data storage locations in accordance with one or more pre-selected memory retention configurations.

30 14. The system of claim 13, wherein the pre-selected memory retention configurations include a configuration that instructs the data store management system not to delete data from a particular data storage location.

15. The system of claim 13, wherein the pre-selected memory retention configurations include a configuration that instructs the data store management system to only delete expired data from a particular data storage location.

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16. The system of claim 13, wherein the pre-selected memory retention configurations include a configuration that instructs the data store management system to delete data from a particular data storage location in accordance with a pre-selected control level.

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17. The system of claim 13, wherein the pre-selected memory retention configurations include a configuration that instructs the data store management system to delete expired data from a particular data storage location and to delete data from the particular data storage location in accordance with a pre-selected control level.

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18. The system of claim 1, wherein the plurality of data storage locations include a browser cache.

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19. The system of claim 1, wherein the plurality of data storage locations include a message store.

20. The system of claim 1, wherein the plurality of data storage locations include an address book

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21. The system of claim 1, wherein the plurality of data storage locations include a browser bookmarks store.

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22. The system of claim 1, wherein the plurality of data storage locations include a calendar data store.

23. The system of claim 1, wherein the plurality of data storage locations include a notes store.
- 5 24. The system of claim 1, wherein the plurality of software applications include an electronic messaging system.
25. The system of claim 1, wherein the plurality of software applications include an Internet browser application.
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26. The system of claim 1, wherein the plurality of software applications include a calendar application.
27. The system of claim 1, wherein the data store management system deletes data from at least one of the accessed data storage locations to free a minimum amount of memory.
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28. A method for managing memory space in a mobile device, comprising:
determining that additional memory space is needed to store application data
20 in one of a plurality of data storage locations, wherein each of the data storage locations stores a different category of application data;
sequentially accessing each of the plurality of data storage locations to identify stored data that satisfies one or more deletion criteria, the one or more deletion criteria including a control level;
25 deleting the identified stored data from at least one of the data storage locations; and
storing the application data in the one data storage location.
29. The method of claim 28, wherein the deletion criteria includes a memory retention configuration.
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30. The method of claim 28, wherein the deletion criteria includes a control level.
31. The method of claim 28, wherein the deletion criteria includes a memory retention algorithm.
- 5 32. The method of claim 31, wherein the memory retention algorithm is a least recently used (LRU) algorithm.
- 10 33. The method of claim 31, wherein the memory retention algorithm is a first in, first out (FIFO) algorithm.
- 15 34. The method of claim 31, further comprising:
determining if a minimum amount of memory is available in the plurality of data storage locations;
if the minimum amount of memory is not available in the plurality of data storage locations, then sequentially accessing each of the plurality of data storage locations to identify and delete stored data that satisfies one or more additional deletion criteria.
- 20 35. A mobile device, comprising:
a plurality of data storage locations;
a plurality of software applications, each software application being operable to store data to a different data storage location;
25 means for determining if insufficient memory space is available in one of the data storage locations; and
means for accessing at least two of the data storage locations and deleting data from at least one of the accessed data storage locations if insufficient memory space is available in the one data storage location in accordance with one or more pre-selected control levels.
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